First Executive Session
BTeV CD-1 Director's Review

October 21-23, 2003

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Agenda for Exec Session

- Charge to Reviewers
- BTeV Schedule for Critical Decisions
- Review Agenda
- Report Structure
  - Table of Contents
    - Findings, Comments, and Recommendations
  - Cost / Contingency Table
- Assignments
  - Technical Reviewer Assignments
  - Breakout Groupings
- Discussion

Charge: Introduction

New CD-1 Charge

Charge: “CD-1 Review”
and partial prep for CD-2

New CD-1 Charge

Charge: Focal Point

New CD-1 Charge

Technical – Design Maturity

- Assess the stage of design maturity for
  - BTeV Detector *'CDR' near TDR*
    - Each sub-detector
  - Interaction Region *Concept?*
    - Accelerator Physics
    - Hardware (magnets, cold boxes, etc.) *mixed*
  - Building Outfitting *"CDR"*

Cost / Schedule Review Guidance

Run IIb Detector Project Technical, Cost, and Schedule Baseline Development

To Succeed in Cost / Schedule Arena

Estimate must be

These are CD-2 Requirements.

Now at CD-1.

We should use as a guide for assessing a baseline "range" or appropriate contingency.

Complete
- Scope well understood and defined
  - Technical goal must be clear
  - Technology to be used to meet this goal known
  - Designate how technical systems will be acquired
    - Ie buy, have fabricated, self fabricated
    - Buy parts / fabricate / assemble
  - How will this be accomplished
    - Self fab / assemble – lab or university(ies)
    - How will person power reqmnts be met
      - And paid for
- All tasks defined and specified in a workbreakdown structure
- WBS dictionary

Documented at lowest level of WBS and include
- M&S – materials and services
- SWF – salaries, wages, & fringes
- Accompanied by schedule showing appropriate durations
- Adders – overheads; division, and G&A (general & administrative)
- Escalated – shown both with and without escalation

Reviewable
- Estimate must "roll-up" from the lowest level to the total and reviewers must be able to drill down from the top to the lowest level

Credible
- Basis of estimate must be specified
  - Catalog prices
  - Similar work, where cost is documented
  - Engineering estimates
  - WAG – wild ass guess

This material forms basis for DOE approving a baseline, for Detector Project Management to measure performance and take appropriate corrective actions during execution and for Laboratory Management and DOE to monitor progress.

Director's CD-1 Review
of
BTeV October 21-23
REVIEW AGENDA

Tuesday, October 21, 2003

8:00 AM – 8:45 AM	Executive Session **(Held in Comitium)**

1 West

9:00 AM – 9:15 AM	Introduction
9:15 AM – 10:15 AM	Project Overview
10:15 AM – 10:30 AM	BREAK
10:30 AM – 11:30 AM	Trigger and DAQ
11:30 AM – 12:30 PM	LUNCH on 2nd Floor Crossover
12:30 PM – 1:30 PM	Tracking Systems
1:30 PM – 3:00 PM	Particle Identification Systems
3:30 PM – 3:45 PM	BREAK
3:45 PM – 4:15 PM	Mechanical and Integration
4:15 PM – 5:15 PM	Interaction Region
5:15 PM – 5:30 PM	C0 Building Outfitting
5:30 PM – 6:30 PM	Executive Session **(Held in Comitium)**
6:30 PM – 7:00 PM	Cocktail Hour
7:00 PM	Dinner at Chez Leon

Wednesday, October 22, 2003

8:00 AM – 12:00 Noon	Technical/ Cost/ Schedule Breakout Sessions (See Breakout Chart)
12:00 Noon – 1:00 PM	LUNCH
1:00 PM – 2:30 PM	Continue Breakout Sessions
2:30 PM – 3:00 PM	BREAK
3:00 PM – 4:30 PM	Executive Session **(Held in Comitium)**
4:30 PM – 6:00 PM	Begin Writing Report

Thursday, October 23, 2002

8:00 AM – 11:00 AM	Continue Writing Report
11:00 AM – 1:00 PM	Dry Run of Closeout (Held in Comitium)
(11:45 AM – 12:30 PM)	Grab Working LUNCH (continue Dry Run of Closeout)
1:00 PM – 2:00 PM	Finish Writing Report
2:00 PM – 3:00 PM	Upload Report Sections
3:00 PM – 4:00 PM	Closeout with BTeV and Fermilab Management **(1 North**

Report Table of Contents (1)

Report Table of Contents (2)

Report Structure

- Review findings, assessments, and recommendations should be presented in writing at a closeout with the Collaborations and Fermilab management.
- Separate Section for each “Level 2” WBS
- Written with
  - Findings
  - Comments and
  - Recommendations

Findings, Comments, and Recommendations

- Findings
  - Findings are statements of fact that summarize noteworthy information presented during the review.
- Comments
  - Comments are judgment statements about the facts presented during the review. The reviewers' comments are based on their experiences and expertise.
  - The comments are to be evaluated by the project team and actions taken as deemed appropriate.
- Recommendations
  - Recommendations are statements of actions that should be addressed by the project team.
  - A response to the recommendation is expected and that the actions taken would be reported on during future reviews.

Writing Assignments

Executive Summary – Temple & LeCompte

1.1 Strait
1.2 Seidel/Tonelli
1.3 Stutte
1.4 Stanek
1.5 LeCompte
1.6 Rust
1.7 Tonelli
1.8 Brooijmans, Pordes
1.9 Pordes, Brooijmans
1.10 Roser (Hoffer)
1.11 Temple
X.1 Strait
X.2 Plunkett
Cost&Schedule Hoffer

Breakout Groupings

Breakout Sessions for Tuesday, October 22, 2003

Breakout Session 1, Mechanical and Integration		
X.1	Interaction Region	Jim Strait
X.2	Building Outfitting	Rob Plunkett
1.1	Vertex, Toroidal Magnet, Beam Pipes	Jim Strait
1.10	Installation, Integration, etc	Rob Roser, Dean Hoffer
1.11	Project Management	Temple, XXXX
Breakout Session 2, Silicon Tracking Systems		
1.2	Pixel Detector	Sally Seidel
1.7	Strip Detector	Guido Tonelli
Breakout Session 3,		
1.3	RICH Detector	Linda Stutte
Breakout Session 4,		
1.4	EM Calorimeter	Bob Stanek
Breakout Session 5,		
1.5	Muon Detector	Tom LeCompte
1.6	Straw Detector	David Rust
Breakout Session 6, Trigger and DAQ		
1.8	Trigger Electronics and Software	Gustav Brooijmans, Don Holmgren
1.9	Event Readout and Controls	Don Holmgren, Gustav Brooijmans

Cmte Cost & Contingency

		Project Estimate				Committee Estimate			
		Base	Cont	Cont		Base	Cont	Cont	
	WBS	Estimate	%	$	Total	Estimate	%	$	Total
1.1	Vertex, Toroidal Magnet, Beam pipes								
1.2	Pixel Detector								
1.3	RICH Detector								
1.4	EM Calorimeter								
1.5	Muon Detector								
1.6	Straw Detector								
1.7	Strip Detector								
1.8	Trigger Electronics and Software								
1.9	Event Readout and Controls								
1.1	Installation, Integration, etc								
1.11	Project Management								
	TOTAL								

Discussion

- Questions and Answers